I-CONSENT's Innovative Teacher Education Programme:
In Pursuit of Equality, Quality and Quantity

Theme: Formal Education

Sub-theme: Revamping Teacher Education

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INTRODUCTION

Indian Consortium for Educational Transformation (I-CONSENT) is a not-for-profit organization. It is composed of public and private institutions, voluntary organizations and individuals who believe in and work for 'techno-social transformation through education for sustainable development'. Four universities, a number of Government Organizations, NGOs and Maharashtra Knowledge Corporation Ltd (MKCL) are the partners in the Consortium's initiatives (see appendix 1). The Commonwealth of Learning (COL), Vancouver, Canada has provided constant support to the I-Consent and participated in its activities. The Consortium employs use of ICT and 'social mobilization for developing quality education for all to achieve sustainable development', adopts 'public-private-community partnership on win-win basis' following the core values of transparency, accountability and openness.

On May 3, 2009 The I-Consent launched a bachelor of education called e-B.Ed in 3 cities of Mumbai, Pune and Nashik as a pilot run involving 47 students. Collaboration and consortium approach was adopted to develop the complete framework of this programme. This programme is designed as a new paradigm programme suitable for today's connected society where learning-working-developing are intimately integrated. The programme uses both online and face-to-face (F2F) mode for delivery of its content and learning activities. Yashwantrao Chavan Maharashtra Open University is the nodal agency of this programme and it awards degrees to deserving students.

The e-B.Ed programme is based on the constructivist theory of education and has a scenario based design. The situations in the programme are the classroom, school, and the community the school serves. Students of the e-B.Ed programme meet their mentors at their study centres once every two weeks or so and are connected through the internet with their mentors, tutors and course experts.

The purpose of the e-Teacher Education Program is to use the scenarios and situations to help students in integrating their learning, working and developing in a connected community of students, teachers, experts, people and institutions. Since the current period is a transitional one, the program takes into account the un-connectednesses and provides education and training that would promote not only life-long-learning but also quality education for all concerned.

ABOUT THE PROGRAMME

The e-B.Ed programme is comprised of six courses, each focusing on a set of roles and competencies a teacher is required to perform today. The courses are:
1. Developer and nurturer of e-culture

2. Teacher as networker and change agent
3. Teacher as e-learning practitioner
4. E-learning Resource developer
5. Teacher as Techno-pedagogue
6. Teacher as evaluator and action researcher

To develop specific competencies and attain the elicited learning outcomes context based scenarios were developed in all courses, each scenario leading to performance of certain learning activities and assignments. The Learning activities provided learning experiences for the completion of the assessable assignments which were largely activities the learners required to perform in their situations and submit reports which were subsequently assessed by the course tutors.

MODALITY

Online education is still in its early stages in India, hence it was considered to adopt a blended approach enabling students to slowly get accustomed to this new mode of learning. Moreover a blended approach takes care of the question of motivation that often challenges the students of distance learning. Each course had 5-6 Distributed Classroom (DC) sessions that were conducted once in a fortnight. Students participated in these sessions at their respective study centres in Mumbai, Pune or Nashik. DCs and their related group activities were conducted for the whole day. The course tutors facilitated the sessions through the Internet while being supported by the local mentors at each of these centres. The learners thus, had the opportunity to interact with their tutors, their mentors as well as their peers. During these sessions, the learners participated in group activities and received academic assistance regarding the course.

EQUALITY, QUALITY AND QUANTITY: AN ELUSIVE TRIANGLE

The Indian education system continues to remain as a challenge even today as this system has not been very efficient in relating education to life, need and aspirations of its people Late J. P. Naik who examined the education system based on the concepts of equality, quality and quantity has emphasized that to improve the modern educational system of India it has to be geared right from the beginning to pursuit of these three major goals. He also indicated these goals although were relative, their emphasis varied from time to time and simultaneous pursuit of these goals has made the task extremely difficult and conflicts inherent in the situation have inevitably come to the surface (Naik, J. P., 1975). According to him, pursuit of quality has often linked itself with privilege; pursuit of quantity, has often led to deterioration of standards and pursuit of equality has been frequently hampered by the inequalities in the society. Equality here is referred to as access of education to learners across different socio-economic classes and regions, and quality, which is a relative concept, is referred to as the capacity to create new social order and contributions to social development. Quantity means the capacity of an educational system that enables large number of persons to participate and pursue education-- even those who desire to be educated but due to various reasons had to discontinue. The present paper is an endeavor to show the e-B.Ed programme has, as far as teacher education is concerned, the potential to addresses these three goals emphasized by J. P. Naik to a good degree.

1. Addressing Equality despite Inequalities in the Society and Educational Settings

1.1 Entry into the programme: The prevailing formal educational system catered more to specific classes and not to all; hence Mahatma Gandhi laid emphasis on basic education with focus on socially useful productive work (SUPW).

The present e-B.Ed programme, to a good extent, addresses the issue of equality at the teacher education level by providing opportunities to students from different socio-economic backgrounds and enables them to overcome the barriers of region and gender. Our statistics for the present batch indicate that the geographical representation of the students is 52% urban,

26% semi-urban and 22% rural, while in terms of gender it is 30% males and 70% females. This clearly indicates that the programme is attractive as well as accessible to various groups in the society.

To overcome the barrier of the traditional selection pattern, the e-B.Ed programme provides opportunity to all and does not impose any specific restriction for students' admission, except that applicants should be graduates and computer literate. However, for learners who aren't sufficiently computer literate provisions are made to enhance their computer skills through a module at the entry point. As the programme is student-centric and providing opportunity to all, it does not adopt competitive methods for either selection of students or assessing their progress.

1.2 Diverse educational settings: Indian schools have diverse facilities both in terms of human and technological resources. This implies that teachers undertaking this programme may be placed in schools which range from having all the technological support (Computers, high speed - Internet, LCD projector etc.) to minimum technological facilities (Few computers with or without online facility). Taking into consideration this reality effort have been made to prepare the student-teachers for any situation by learning to teach in six classroom settings, namely
- Individual + computer
- Small groups + computer (with / without mentor)
- Individual with computer in virtual groups
- Distributed classrooms through the Internet
- Virtual classroom through satellites
- Technology enhanced classrooms

Hence the teachers function equally effective irrespective of the kind of facilities available in schools. This is a significant feature of this programme compared to the traditional teacher education programmes as it prepares flexible and multi-skilled teachers. For instance, the course on 'networking' develops networking skills among the student teachers in both F2F and online environments.

1.3 Deployment strategy: The deployment strategies adopted provide the scope for the learners to participate in this programme on full time or part time basis. Students have the freedom to complete the whole programme on their own pace within two to five years.

1.4 Equal attention to all: Provision of personalized support and guidance is less practiced in the traditional teacher education programmes due to their rigid time and programme structures. The online mode has enabled us to overcome this time and place barrier by allowing interactions between learners and experts, coordinators, tutors and their mentors. This structure is arranged around low pupil-teacher ratio, providing equal and personalized attention to all.

1.5 Equal access to learning materials: All the students have equal access to learning materials. This is ensured by providing enough resources online and hard copies of study materials at no extra cost. Additionally Open Educational Resources (OER) has also been introduced in the programme. Experts, tutors, mentors, students and others contribute relevant learning resources. To encourage students, provisions are made in the assessment process to give adequate weight age to their contributions to the programme OER.

2. Ensuring Quality and Contributions to Social Development

2.1 Course design: The development of each course for this programme emerged through a series of workshops spread over three years period involving educationists and professionals with experiences in relevant fields. To ensure high quality outputs, collaborative and consortium approach was adopted to formulate the courses. Contributions from international advisers were also obtained to guarantee validity and enrich the programme's design and approach. The thrust of the programme design in on the roles the teachers perform in real school situation. Hence each course was developed around a set of competencies that lead to performance of the roles rather than enhancement of knowledge alone. Moreover, besides the

'learning outcomes', there are certain competencies in each course to ensure 'developmental outcomes' for situational development. The following illustrate the competencies and roles for some of the courses in this programme.

Course I : Developer and Nurturer of e-Culture

Role: Developer and nurturer of e-culture
Module 'A': Attributes of e-Culture: Developing and Using Practices, Protocols, Tools and Ethics
Competencies
- Acquiring and practicising skills related to ICT
- Promoting important features of e-culture

Module 'B': Cooperative Learning for Development with Universal Human Values
Competencies
- Conducting collaborative learning activities, using cooperative learning structures and practices for working and developing together and imbibing universal human values for nurturing e-culture
- Practicing democratic and universal values in various interactivities, and situations

Course III – Teacher as e-learning Practitioner

Role: Counselor, Facilitator, Motivator and Moderator
Module 1: Facilitator
Competencies
- Adapt different e-learning approaches to learning situations
- Plan and implement e-learning activities based on individual differences
- Use methods of group dynamics to improve group behavior.
- Plan and implement motivational strategies for fostering creativity and problem solving.

2.1 Continuous quality monitoring and assurance: To ensure, maintain and improve quality, a three level mechanism has been adopted.
Level 1- Students' feedback: Self-assessment and feedback by the students at the end of each course is obtained. In addition, students' gathering with mentors and experts are held at the end of every other term to discuss difficulties and obtain suggestions for improvement.
Level 2- Course team reflections: Periodic meeting of various course team members are conducted for reflection, consultation and adopting corrective measures.
Level 3: Academic Coordination Committee: This Committee is composed of course team leaders, experts and institutional representative. They meet at least twice a year to review the progress and decide effective rules and policies to ensure quality.

2.3 Promoting collaborative and cooperative learning: Activities have been designed so as to ensure collaborative and cooperative learning. More emphasis is put on group activities and pair works rather than individual tasks. These activities are carried out in both F2F sessions and online. An example of a cooperative learning activity from Course 2 is as follows:

"Your e-B.Ed class is divided into two groups. Please check with your mentor the group you have been assigned to. The two groups, assisted by a leader each, will take part in a discussion. One group will discuss and present the characteristics of a traditional classroom and its implications on the role of a teacher. The other group will discuss and present the characteristics of an e-classroom (virtual) and articulate its implications on the role of the teacher."

2.4 Creating common wealth for the community: Learners are encouraged to initiate and participate in activities related to their social context. For instance, service learning activities in course I and II allowed the students to initiate concrete steps in collaboration with local stakeholders to address local educational or social issues. It is observed that when students

initiate such activities, they contribute significantly towards social development and creation of common wealth. This common wealth could be of different kinds such as

- Knowledge,
- Technology,
- Natural,
- Social and Organizational,
- Ethical and moral,
- Physical and financial.

2.5 Holistic approach to evaluation: No formal written examination will be conducted during or after completing the programme. Since the programme is based on development of skills, competencies, attitudes and capabilities, students' performance is assessed through formative evaluation during the course period. This carries 50% weight age. It is based on the comprehensive assessment of students' e-portfolio, submission of assignments, applications, presentations and performance in the interview. The remaining 50% is given at the end of the programme while assessing students' Project works.

The parameters of evaluating students' performance include knowledge, skills developed, applications, attitudes and social behavior of the student. To obtain a comprehensive view of each student's progress, a number of evaluation tools have been adopted. They include:

- personal e-portfolio
- group e-portfolio
- presentation e-portfolio
- Viva-Voce at end each term

The personal e-portfolio contains information regarding the student, his/her evolving conceptual framework for learning and developing, report of the course activities, assessable assignments, tutor's comments on his/her submissions and grades obtained. The group e-portfolio contains the details of the activities the student has carried out in collaborative and cooperative teams and the feedback of tutors and mentors on each activity. The presentation portfolio includes items the student wishes to share with others, his/her experience in creating social common wealth and his/her contributions to the OER.

2.6 Levels of achievement: Opportunities are provided to the learners to improve their learning at various levels. These include basic level, proficiency level and talent level.

2.7 Learning activities and assignments: The learning activities which are not assessed provide opportunities to the students to learn and practice the course content and develop their capabilities before attempting to carry out their assessable assignment. After submitting these learning activities students receive feedback from the mentors and tutors. These learning activities prepare them to complete their assignments more thoroughly.

2.7 Motivating students: A major challenge in conventional distance education is sustaining students' high level of motivation. Here the components that maintain motivation include:

- The DC and F2F sessions conducted fortnightly
- Online interactions with mentors/tutors and their feedback
- Students' team works in between the contact sessions

2.8 Overcoming resource scarcity: The hurdle of resource scarcity is overcome by providing relevant online resources. Webinars are also conducted to involve local, state, national and international resource persons. The OER also provides additional resources.

3. Quantity but Not Deterioration of Standards

Naik J. P. (1975) raised three queries related to quantity aspect of education, i.e. who shall be educated, when and how?

3.1 Who and when? This programme has indicated its potential to reach across socio-economical, geographical and political borders. Students, housewives, teachers and professionals have enrolled for this programme. The motive of the majority of the learners is not to obtain a degree, but to 'improve their life skills', 'enhance their professional skills and abilities', 'achieve personal and professional growth' and 'explore a creative evolutionary approach to education'.

3.2 How? This programme has integrated formal, non-formal and informal systems of education. Formal, because it is a certificate programme of a State University, following University rules and regulations, has a course structure and evaluation framework. Non-formal, since it is time and place independent, submission deadlines are not rigid and students are free to learn at their own pace. In-formal, because a lot of learning is generated through extension activities that students carry out in their institutions and communities. Due to these characteristics it has more scope to reach diverse population. Moreover it is a DL programme using a blended approach that can easily reach many students. The already existing widespread MCKL platform of about 5000 centres in Maharashtra is available for this programme. Since at each e-B.Ed centre, the local mentors are supported by online tutors and experts, it is possible that some of the outstanding graduates of the e-B.Ed programme can be groomed into becoming local mentors to increase the outreach the programme to many remote corners of the state with diverse social strata.

CONCLUSION

The teacher education programmes that are struggling to meet the need for growing number of teachers across the country will find this e-B.Ed programme as a silver lining for training large number of teachers and reforming the situations in classrooms, schools and communities. The capacity of the programme to address the issues of equality, quality and quantity as expressed in the earlier paragraphs is real. Although, the programme is at the stage of pilot implementation, it has revealed tangible impacts on the learners, their schools and their communities. For example, volunteerism among students, self initiatives and knowledge sharing among them, greater bonds of cooperation among course developers and collaborative working skills are some such indicators. The responses from the parents, school authorities and institutions of civil society to students' initiatives have been positive and productive.

Social networking emerged as a natural phenomenon during the implementation of this programme. It was seen that the students participated in extensive blogging and during this process a few had discussions with teachers from other countries too. The significance of this type of social networking is that the teachers graduating from this programme are able to enrich and update themselves by sharing learning experiences with each other and other teachers across the world.

The long term impact of the programme is achieved when the e-B.Ed graduates functioning as teachers enter the real educational scene of the country. We foresee them as change makers who have the potential to solve real life problems related to their schools, students and communities. They enter their profession as a new kind of teachers who emphasize on attitude change, learning for development and social transformation. They will create a new culture of learning that is based on cooperation, human values, use of the latest ICT, free access to knowledge, creating new knowledge, research and social action.

REFERENCES

Naik, J. P., 1975. *Equality, quality and quantity: The elusive triangle in Indian Education.* Indian Institute of Education. pp. 3-4, Pune

APPENDIX 1

Associates in I-CONSENT Activities:

1. Maharashtra Knowledge Corporation Limited (MKCL), Pune
2. YC Maharashtra Open University, (YCMOU) Nashik
3. Indian Institute of Education, (IIE) Pune.
4. NETRA, Pune
5. Baha'i Academy, Panchgani
6. Gram Mangal, Thane
7. K.K.C., University of Mumbai
8. Pune University
9. SNDT University
10. Homi Bhabha Center for Science Education (TIFR) Mumbai
11. Maharashtra State Council for Education, Research and Training, (MSCERT) Govt of Maharashtra
12. Sarva Shiksha Abhiyan (MPSP) of Maharashtra State
13. National Institute of Open Schooling (NIOS), Govt of India, New Delhi
14. Delhi University
15. WIPRO Foundation

Besides these, many other lead institutions at state level are being invited to participate.